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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HARBECK, TIMOTHY M	
ART UNIT	PAPER NUMBER
3692	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/912,918	HOWARD, NEWTON	
	Examiner	Art Unit	
	Timothy M. Harbeck	3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varon (US PAT 6,420,993 B1).

Re Claim 1: Varon discloses an automated system for notifying a first user who issued a first instruction and a second user who issued a second instruction of a potential conflict comprising:

- An input device for receiving the first instructions entered by the first user (Column 4, lines 24-26; "flight data plans," flight data processor (24a) receives plans submitted by aircraft personnel to designate routes.")
- A passive (radar, transponders) input device for receiving the second instruction entered by the second user (Column 4, lines 8-21; flight data and plans for second plane)
- An intention determination system for analyzing the instructions including, determining if execution of the instructions complies with the users' intent based, in part, on a comparison of the instructions with stored reference information, and issuing an alert if execution of the instructions creates the potential conflict (Column 4 lines 26-38; Column 4 line 66-Column 5 line 18)

Varon does not explicitly disclose first and second user interfaces for respectively notifying the first and second user by displaying the alert. However it was well known in the art and therefore would have been obvious to anyone of ordinary skill at the time of invention for airplanes to have user interfaces such as a radar system in the cockpit in order to notify and display the pilots if there is a potential conflict with regards to other aircraft. If there were no means to relay this information from the air traffic controller to the pilots, the pilots might not know of the potential conflict and may not be able alter their routes to avoid the issue.

Re Claim 2: Varon discloses the claimed system supra but does not explicitly disclose wherein the instructions include text messages. However the submission of text messages is a notoriously old and well-known form of electronic communication and would have been obvious to one of ordinary skill at the time of invention to include to the system of Varon. One would be motivated to dot his in order to provide short and succinct instructions in a language that is easily viewed and interpreted by an input device.

Re Claim 3: Varon discloses the claimed system but does not explicitly disclose wherein the instructions are issued by military personnel. However, Varon does not the use of similar systems for military applications (Column 1, lines 38-43). It was well known for military planes to be piloted and tracked by military personnel and therefore it would have been obvious to anyone of ordinary skill at the time of invention to conclude that said military personnel were issuing the instruction including flight routes and mission plans to the system.

Re Claim 4: Varon discloses the claimed system and further discloses wherein the input device includes a device selected from the group consisting of a cellular phone and a radio transmitter (Column 3, lines 65 - Column 4 line 7).

Re Claim 5: Varon discloses the claimed system supra and further discloses wherein the passive input device includes a device selected from the group consisting of a cellular phone and an electronic pad, a sensor ("transponder" Column 4, lines 17-19; "second portions of the target signal."), and a satellite.

Re Claim 6: Varon discloses the claimed system supra but does not explicitly disclose a printer for creating a hard copy of the alert. However it was well known in the art at the time of invention to use a printer for such applications and therefore it would have been obvious to anyone of ordinary skill to include this feature to the system of Varon. One would be motivated to do this in order to have a record of past alerts to review the past conflicts in order to adjust future flight plans and timing patterns to avoid similar problems in the future.

Re Claim 7: Varon discloses the claimed system supra but does not explicitly disclose wherein each of the user interfaces includes a node-based navigation system that allows user customization of how the alert is displayed. However it was well known for node-based navigation systems to be used by pilots in order to display an aircrafts position relative to other aircraft. Furthermore it was well known for a user to customize a display interface so that each individual can quickly and easily interpret the data on the display in a manner that is most comfortable to them. Therefore it would have been obvious to include these features to the system of Varon so that each pilot can be

notified of a potential conflict and furthermore can view the upcoming hazard so that evasive action can be taken.

Re Claim 8: Varon discloses the claimed system supra and discloses wherein at least one of the first users issues at least one of the instructions from a remote location (planes are inherently in remote locations).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Varon as applied to claim 1 above, and further in view of Ladwig (US 6,408,404 B1).

Re Claim 9: Varon discloses the claimed method supra and further discloses

- An input module for receiving and processing the instructions (Column 4, lines 24-26; Ref 24a)
- A rule base analyzer for periodically retrieving and processing at least some of the instructions and reference information to determine if execution of the instructions creates the potential conflict (Column 4, lines 30-37, lines 60-65)

Varon does not explicitly disclose:

- A language converter for converting the instructions from a natural language format to a position-based format wherein the conversion generates restructured instructions
- A database for storing both the instructions, the restructured instructions and reference information

Ludwig discloses a system and method for ensuring and managing situation awareness including a language converter for translating data streams (Column 5, lines 19-27 and Column 6, lines 20-21). It would have been obvious to anyone of ordinary skill at the time of invention to include this feature to the system of Varon so that there is not a substantial delay if the instructions are received in a language that is not the standard. Any delay in the instruction processing is potentially dangerous as the planes in the Varon system may be on a path for conflict. The sooner this is recognized, the sooner evasive action can be taken. By providing a language translator between the user and the system and delays can be minimized.

Furthermore, Ludwig discloses a database for storing information related to the instructions and reference information (Column 5, lines 48-58; Ref 190). It would have been obvious to anyone of ordinary skill at the time of invention to include this feature to the system of Varon so that there is a way to recall the instructions in the instance that there is a problem in the language translation. If the language transformation was improper and the original instructions were not stored, the original information would be lost and there would not be any means to determine the original intent of the instructions. This would be hazardous as potential conflicts with aircrafts are very time dependent and any delay in issuing an alert would be dangerous.

The references also do not disclose wherein the language converter converts the instructions into a positions based format. However this step is old and well known in the air traffic control, and would have been obvious to anyone of ordinary skill to allow tactical planners to assess the geographical position of the parties involved in order to

assess the risk involved. Utilizing a position-based format allows each party to be marked respective to one another, which allows for more efficient planning.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig (6,408,404 B1) in view of Varon.

Re Claim 10: Ludwig discloses a system and method for ensuring and managing situation awareness for checking of potentially conflicting natural language instructions issued by a plurality of users comprising:

- An input module for processing the instructions received from at least one input device (Column 7, lines 51-57)
- A language converter for converting the instructions from a natural language to a format, wherein the conversion generates restructured messages (Column 5, lines 24-26; Column 6, lines 20-21)
- A database for storing both the instructions, the restructured messages and reference information (Ref 195; Column 5, lines 48-58)
- A rule-based analyzer for periodically retrieving and processing at least some of the instructions, restructured messages, and reference information wherein, processing includes determining if execution of the instructions complies with the users' intent based, in part, on a comparison of the restructured messages with stored reference information (Column 4, lines 25-38), wherein the analyzer generates an alert if execution of a first

portion of the instructions creates the potential conflict (Column 7, line 65-Column 8 line 14)

- A plurality of user interfaces for respectively notifying the first portion of users of the potential conflict by displaying the alert (Column 8, lines 15-18).

Ludwig does not disclose wherein the system is an intention determination system for predictive checking of potentially conflicting messages. Varon discloses an air traffic control system that periodically monitors air traffic based on current situational awareness as well as intention-based information (i.e. flight path; Column 4, lines 24-26) and issues alerts about potential conflicts. It would have been obvious to anyone of ordinary skill in the ordinary art at the time of invention to include the intention determination aspect of Varon to the disclosure of Ludwig in order to provide the system with a more forward looking timeline of potential events and military conflicts. Ludwig discloses that a his invention is intended to have a dynamic temporal flow and present information as events spread over a timeline with a past present and a future (Column 6, lines 48-54). By providing high probability future events (such as flight plans for military operations), the system can extend even further and provide the user with even more information from which to make decisions. This would further assist in assessing events and issuing rule-based actions.

The references also do not disclose wherein the language converter converts the instructions into a positions based format. However this step is old and well known in military conflicts, and would have been obvious to anyone of ordinary skill to allow

tactical planners to assess the geographical position of the parties involved in order to make a coordinated plan. Utilizing a position-based format allows each party to be marked respective to one another, which allows for more efficient planning.

Re Claim 11: Ludwig in view of Varon discloses the claimed system supra and while not explicitly disclosing wherein the instructions include orders issued by military personnel, Ludwig discloses the advantages of his system for low intensity conflict monitoring, military intelligence and strategic threat assessment (Column 1, lines 44-48). It was old and well known in the art for military personnel to handle issues of military intelligence and strategic threat assessment and therefore would have been obvious to anyone of ordinary skill at the time of invention that instructions relating to such matter are issued by military personnel.

Re Claim 12: Ludwig in view of Varon discloses the claimed system supra and Ludwig further discloses wherein the input device includes a device selected from the group consisting of a cellular phone, a radio transmitter, an electronic pad, a sensor and a satellite (Column 5, lines 29-31).

Re Claim 13: Ludwig in view of Varon discloses the claimed system supra and Ludwig further discloses wherein the user allows user customization of how the alert is displayed (Column 8, line 14-17 and 29-31). While not explicitly disclosing a node based navigation system, these types of systems are old and well known in the art (such as a grid based satellite tracking system) and would have been obvious to anyone of ordinary skill at the time of invention. One would be motivated to include this feature

in order to coordinate disjointed parties and locate their positions relative to one another.

Re Claim 14: Ludwig in view of Varon discloses the claimed method supra wherein at least one of the instructions is issued from a remote location (Column 2, lines 10-14 "disjointed sources").

Re Claim 15: Ludwig discloses a system for potentially conflicting natural language instructions issued by a plurality of users comprising:

- A plurality of input devices (Column 7, lines 43-50) for receiving the instructions to determine relevance (Column 7, lines 14-15; "priority")

A system positioned to receive the instructions from the input devices comprising:

- An input module for processing the instructions received from at least one input device (Column 7, lines 51-57)
- A language converter for converting the instructions from a natural language to a format, wherein the conversion generates restructured messages (Column 5, lines 24-26; Column 6, lines 20-21)
- A database for storing both the instructions, the restructured messages and reference information (Ref 195; Column 5, lines 48-58)
- A rule-based analyzer for periodically retrieving and processing at least some of the instructions, restructured messages, and reference information wherein, processing includes determining if execution of the instructions complies with the users' intent based, in part, on a comparison

of the restructured messages with stored reference information (Column 4, lines 25-38), wherein the analyzer generates an alert if execution of a first portion of the instructions creates the potential conflict (Column 7, line 65-Column 8 line 14)

- A plurality of user interfaces for respectively notifying the first portion of users of the potential conflict by displaying the alert (Column 8, lines 15-18).

Ludwig does not disclose wherein the system is an intention determination system for predictive checking of potentially conflicting messages. Varon discloses an air traffic control system that periodically monitors air traffic based on current situational awareness as well as intention-based information (i.e. flight path; Column 4, lines 24-26) and issues alerts about potential conflicts. It would have been obvious to anyone of ordinary skill in the ordinary art at the time of invention to include the intention determination aspect of Varon to the disclosure of Ludwig in order to provide the system with a more forward looking timeline of potential events and military conflicts. Ludwig discloses that a his invention is intended to have a dynamic temporal flow and present information as events spread over a timeline with a past present and a future (Column 6, lines 48-54). By providing high probability future events (such as flight plans for military operations), the system can extend even further and provide the user with even more information from which to make decisions. This would further assist in assessing events and issuing rule-based actions.

The references also do not disclose wherein the language converter converts the instructions into a positions based format. However this step is old and well known in military conflicts, and would have been obvious to anyone of ordinary skill to allow tactical planners to assess the geographical position of the parties involved in order to make a coordinated plan. Utilizing a position-based format allows each party to be marked respective to one another, which allows for more efficient planning.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig.

Re Claim 16: Ludwig discloses a user interface comprising:

- A display panel (Fig 1 Ref 112)
- A preferences panel for selecting display preferences for objects that appear in the display panel (Column 7, lines 29-31)

Ludwig does not explicitly discloses a node-based navigation system including four navigational nodes representing preferences (Column 8, line 26), areas of operations, units and fragmentary orders; wherein the selection of one of the nodes repositions that node in the center. However, Ludwig does disclose that the system is relevant to military intelligence and strategic threat assessment (Column 1, lines 44-48). It was old and well known for such operations to be concerned with a particular geographic area where the military presence (i.e. units) is located as well as their activities within the areas (i.e. fragmentary orders or stream management Column 8, line 25). It would have been obvious to anyone of ordinary skill in the art at the time of invention to allow the user to display this information in the system of Ludwig as this

information is vital to any assessment of military intelligence and conflict strategy. In preparing for an operation decision makers would need to have this information readily available in order to formulate an appropriate plan. Furthermore the system of Ludwig discloses a variety of navigation controls and toolbars within the user interface to allow for display management (Column 8 line 24-Column 9 line 45), including wherein the selection of a node repositions that node in the center (Column 8, lines 62-63). While not explicitly stating the specific nodes again the information represented by these nodes is well known as being vital to any military planning system and would be obvious to anyone of ordinary skill in order to completely assess a situation, apply a set of parameters and issue orders with respect to the situation.

Response to Arguments

Applicant's arguments filed 11/06/2006 have been fully considered but they are not persuasive.

Applicant has amended the claims in an attempt to distinguish between the present invention and the prior art. However, the examiner still believes that that Varon reference discloses the amended limitation of "an intention determination system for analyzing the instructions, including, determining if execution of the instructions complies with the user' intent based, in part, on a comparison of the instructions with stored reference information." In Varon, radio signals are sent between targets (airplanes) and a radar system that indicate current location from the target data signals (Column 4, lines 29-30). This information is further compared with previously stored information including "flight data plans submitted by aircraft personnel to designate

routes (Column 4, lines 25-27)." This information is then used by a "conflict alert processor," to alert the aircrafts that there is the potential for a conflict according to the current information and the stored information (Column 4, lines 30-38). In the examiners opinion the Varon does, in fact disclose "an intention determination system for analyzing the instructions, including, determining if execution of the instructions complies with the user' intent based, in part, on a comparison of the instructions with stored reference information." Therefore the examiner maintains the rejection.

In addition, the applicant has not attempted to refute examiners previous statements of official notice. According to the MPEP, (2144.03), If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice. Therefore these statements are taken as admitted prior art.

No other arguments were presented.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RICHARD E. CHILCOT, JR.
SUPERVISORY PATENT EXAMINER